

## STORIES of New Jersey

As soon as the early settlers discovered the presence of iron deposits they set about establishing forges and furnaces. By 1750 England was allowing the importation of American iron free of duty, and the iron could be shipped at a slight cost as ballast. But English iron manufacturers had as early as 1719 started agitation to curtail the manufacture of iron goods in America. Nevertheless iron works began to spring up at various points throughout the colony, and during the Revolutionary War they were taxed to their capacity turning out much-needed cannon and other munitions for the Continental Army.

Compared to the vast iron production of today the yield of iron products before the 19th century seems insignificant. In 1783, according to a report published by Samuel Gustaf Hermelin, a Swedish mining engineer who had come over here to investigate the iron industry, the entire annual pig-iron output of New Jersey, including the hard-iron furnaces in the north and the bog-iron furnaces in the south, amounted to only 3,500 tons. Today from one New Jersey furnace alone the annual output is more than 300,000 tons.

There were many handicaps to be overcome by the early iron makers, chief of which was cost of labor and transportation, not to mention loss of time because of the primitive methods then in use. Twenty miles of road transportation cost 30 shillings a ton, whereas shipping by water cost only 5 shillings.

The bog-iron communities were set up much like the feudal estates of medieval Europe. Sometimes as many as 600 people would be living in one of these communities in the heart of the woods. The center of communal life was the master's (manager's) home. It was called the "big house" and was generally an elaborate establishment with its vegetable patch and flower gardens. Here the workmen brought their problems and grievances and the stranger would always find supper and a night's lodging. Schools, stores, churches, sawmills and gristmills were built to serve the needs of the workers and their families. These were exempt from taxation as long as they produced only enough for the needs of the community. Dams, sluiceways and water wheels had to be built, in addition to the furnaces and forges. Near the furnace or forge were the workmen's homes.

Skilled workers from the iron-producing countries of Europe were offered every inducement to come, and yet their rate of pay sounds ridiculously low to modern ears. Workmen received pay varying from \$20 to \$25 a month, paid mostly in goods. In some cases the price of goods, such as flour and pork, was marked up 25 percent over the wholesale price while such things as tea, coffee, cloth, sugar and rum, which were imported, were marked up 50 percent. Many workmen preferred to work for lower wages provided payment was made in cash.

A great deal of the work was done by slaves and indentured servants. These latter were people who were brought overseas under contract to pay off their passage money in three years' time, during which they were given food and lodging but no money. At the end of their period of service the ironmaster was obliged to supply them with a suit of new clothes.

The ore, dug from the surface of the land, was transported by wagons or floated downstream in barges to the nearest furnace, to be converted into pig iron. The furnace was a four-sided stack of stone or brick, 20 feet or more in height, tapering from a 24-foot base to about 16 feet at the top. Where pos-